

S/128/63/000/003/002/005
A054/A126AUTHOR: Reva, I.L.

TITLE: Improving the technology of casting in ceramic molds

PERIODICAL: Liteynoye proizvodstvo, no. 3, 1963, 8 - 9

TEXT: The Kuybyshevskiy staleliteyny zavod (Kuybyshev Steel Foundry) uses a mold and core mix of marshalite and quartz sand (in a 3 : 1 ratio) that is washed and then baked at 950°C for 3 - 4 h. 300 g of the mix (which also contains 5% of 15-% NaOH or KOH) is added to 100 ml ethyl silicate. The mix dries in 1 - 3 min. With the ceramic mold mixes thin-walled products can be cast which have geometric and surface qualities close to those of castings made in investment molds. Tests were made (in cooperation with A. Kovalenko and V.S. Babak) to eliminate the washing and baking of the mix components. In the experiments quartz sand, dried to a moisture content of 0.5% and screened through a no. 30 screen, and crushed quartz powder (with a 1-% moisture) were mixed in a 1 : 3 ratio. The non-baked mold mix, which contained 30% quartz sand and 70% marshalite, had a tensile strength of 0.56 kg/cm² and a compression strength of

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Improving the technology of casting in ceramic molds

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10 kg/cm², whereas the corresponding values of the conventional compositions are 0.48 and 9.0 kg/cm². The flawless output was further increased by sprinkling the riser with an exothermic mixture of 42% iron ore, 38% sand and 20% aluminum powder. The use of ceramic mold mixes lowered the cost per 1 ton of flawless product by 20% and rendered it possible to produce heat-resistant and carbon steel castings of up to 200 kg. There is 1 table.

Card 2/2

REVA, I.N.; PTUSHKIN, K.F.

Conscientious work leads to the path of production success.

Vest. sviazi 24 no.11:27-28 N '64.

(MIRA 18:2)

1. Starshiy ekonomist Kiyevskogo otdeleniya perevozki pochty
(for Reva).

REVA, K., TYUPENKO, YA.

Chkalov Province - Afforestation

Shelterbelt forestry in the Southeast. Kolkh. proiz. 12 No. 6 1952

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

REVA, K.; TYUPENKO, YA.

Afforestation

Mechanization of forest belt cultivation. MTS 12, no. 7, Jl. 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952 ~~1971~~, Uncl.

ROVA, K. I., VARLAMOV, S. T.

Feeding and Feedings Stuffs

How we prepare food. Korm. baza 4 No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

2304 Reva, L.F.

Smazka Traktorov. Kiev, Gosset'khozizdat USSR, 1954. 187s. s Ill. 22sm.
15.000 EKZ. 4r. 30k.- Bibliogr: s. 183-84 (26 Nazv.)-Na UKR Yaz.

(54-56027)

629.114.2-724(016.3)

REV. 1.1

SHMORGUN, P.M.; REVA, I.M.

("The movement of Ukrainian peasants during the first Russian revolution" by M.N. Leshchenko. Reviewed by P.M. Shmorhun, I.M. Reva). Visnyk AN URSR 28 no.6:73-75 Je '57. (MLBA 10:8)
(Ukraine--Peasant uprisings)
(Ukraine--Revolution of 1905)
(Leshchenko, M.N.)

REVA, I.N.; KOTOVSKIY, A.M.

We are striving for the honorable title of enterprise of communist labor. Vest. svyazi 21 no.8:25 Ag '61. (MIRA 14:9)

1. Ispolnyayushchiy obyazannosti nachal'nika Kiyevskogo Otdeleniya perevozki pochty (for Reva). 2. Predsedatel' mestnogo komiteta otdeleniya perevozki pochty (for Kotovskiy).
(Telecommunication--Employees)

REVA, L.P.

GROZIN, B.D., prof., doktor tekhn.nauk; CHUDIROVSKIY, V.G., doktor tekhn.nauk, retsenzent; VAYNBERG, D.V., doktor tekhn.nauk; retsenzent; BARABASH, M., kand.tekhn.nauk, retsenzent; DRAYGOR, D.A., kand.tekhn.nauk, retsenzent; ISHCHENKO, I.I., kand.tekhn.nauk, retsenzent; REVA, L.P., kand.tekhn.nauk, retsenzent; SALION, V.Ye., kand.tekhn.nauk, retsenzent; SHEVCHUK, V.A., kand.tekhn.nauk, retsenzent; SOROKA, M.S., red.izd-va; RUDENSKIY, Ya.V., tekhn.red.

[Studies in metallography and wear resistance of metals; collection of papers] Issledovaniya v oblasti metallovedeniya i kontaktnoi prochnosti metallov; sbornik dokladov. Pod obshchei red. B.D. Grozina. Kiev, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 127 p. (MIRA 12:1)

1. AN Ukrainskoi RSR, Kiev. Instytut budivel'noi mekhaniky.
2. Chlen-korrespondent AN Ukrainskoy SSR (for Grozin).
(Metallography) (Mechanical wear)

LITBAK, I.M.; REVA, L.P.

Causes of the accumulation of dextrorotatory substances in the products of sugar refining. Sakh.prom.35 no.3:28-30 Mr '61.

(MIRA 14:3)

1. Kiyevskiy tekhnologicheskij institut pishchevoy promyshlennosti imeni Mikoyana.

(Sugar manufacture) (Raffinose)

LIKHITSKIY, M. Kh., inzh.; LITVAK, I. M., doktor tekhn. nauk;
REVA, L. P., kand. tekhn. nauk

Effect of some factors on the rate of the settling of first
carbonation juices. Pishch. prom. no. 1:32-37 '65.
(MIRA 18:11)

LITVAK, I.M.; REVA, L.P.

Decomposition of sucrose in the heating of its slightly alkaline
solutions. Trudy KTIPP no.24:3-17 '61. (MIRA 15:6)
(Sugar manufacture) (Sucrose)

LITVAK, I.M.; REVA, L.P.

Decomposition of sugars during the settling of carbonated juice.
Sakh. prom. 35 no.8:17-21 Ag '61. (MIRA 14:8)

1. Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti imeni Mikoyana.

(Sugars)

REVA, L.P.; LITVAK, I.M.

Alkaline decomposition of sucrose. Trudy KTIPP no.22:21-28 '60.
(MIRA 14:3)

(Sucrose) (Alkalies)

REVA, L. P.

USSR/ Miscellaneous - Book review

Card 1/1 : Pub. 128 - 27/31

Authors : Zalogin, N. S.

Title : Criticism and bibliography

Periodical : Vest. mash. 10, 108-109, Oct 54

Abstract : A critical review is presented of N. S. Gapanovich, I. Ya. Krays, L. P. Reva, and M. A. Rokhlenko's book, "Reference Materials on the Exploitation and Repair of Automobiles", published by Mashgis 1953. The book is being severely criticized by the author of this article and in his opinion it contains to many errors and misinterpretations to be of any practical value.

Institution : ...

Submitted : ...

GAPANOVICH, N.S.; KRAYZ, I.Ya.; REVA, L.P.; ROKHLENKO, M.A.

[Materials for the operation and repair of automobiles] Materialy dlia ekspluatatsii i remonta avtomobilei. Kiev, Gos.nauchno-tekhn. isd-vo mashinostroit. i sudostroit. lit-ry [Ukr.oid-nie] 1953. 292 p. (MLRA 7:6)
(Automobiles--Repairing) (Automobiles--Apparatus and supplies)

REVA, M.F. (Omsk)

Operating a train with one conductor. Zhel. dor. transp. 40
no.8:71-72 Ag '58. (MIRA 11:9)

1. Nachal'nik Omskogo konduktorskogo rezerva.
(Railroad conductors)

REVA, M. L.

"The Natural Restoration and Propagation of Underbrush on the Southern Forest Steppes and on the Steppes of the Ukrainian SSR." Cand Agr Sci, Khar'kov Order of Labor Red Banner Agricultural Inst imeni V. V. Dokuchayev, Min Higher Education USSR, Khar'kov 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)

SO: Sum. No. 598, 29 Jul 55

REVA, M.L.; DUBOVIK, O.M. [Dubovyk, O.M.]

New habitat of *Eremurus spectabilis* M.B. in the Ukraine. Ukr.bot.
zhur. 17 no.1:85-86 '60. (MIRA 13:6)

1. Institut botaniki AN USSR, otдел vysshikh rasteniy i Derkul'skaya
lesnaya ispytatel'naya stantsiya Ukrainskogo nauchno-issledovatel'sko-
go instituta lesnogo khozyaystva i agrolesomelioratsii.
(Ukraine--Desert candle)

REVA, M.L.

Common cypress in the "Sofievka" Dendrological Park. Biol.glav.
bot.sada no.43:19-22 '61. (MIRA 15:2)

1. Dendropark "Sofiyevka" Tsentral'nogo respublikanskogo
botanicheskogo sada AN USSR.
(Ukraine--Taxodiaceae)

KRIVUL'KO, Densi Stepanovich [Kryvul'ko, D.S.]; REVA, Mikhail
Lukich; TULUPYI, Grigoriy Grigor'yevich [Tulupil, H.H.];
KONDRATYUK, Ye.M., kand. biol. nauk, otv. red.; KOVAL', V.A.,
red. izd-va; KADASHEVICH, O.A., [Kadashevych, O.A.], tekhn.
red.

["Sofievka" Arboretum] Dendrologichnyi park "Sofiivka." Kyiv,
Vyd-vo Akad. nauk URSR, 1962. 81 p. (MIRA 15:7)
(Uman'... Arboretums)

REVA, M.L. (Uman')

In the Kamenka Valley; the dendrological park "Sofiyevka." Pri-
roda 53 no.7:73-75 '64. (MIRA 17:7)

REVA, M.L.

White pine in the Uman' region. Biul. Glav. bot. sad. no. 52:
30-32 '64. (MIRA 17:4)

1. Dendrologicheskiy park "Sofiyevka" Tsentral'nogo respublikanskogo
botanicheskogo sada AN UkrSSR, Uman'.

REVA, Mikhail Lukich; KONDRATYUK, Ye.M., doktor biol. nauk,
stv. red.; KUZNETSOVA, A.S., red.

[Vegetative propagation of trees and shrubs under natural
conditions] Vegetativne rozmnozheniia derevnykh ta kushcho-
vykh roslin v pryrodnykh umovakh. Kyiv, Naukova dumka,
1965. 215 p. (MIRA 18:9)

REVA, M.L.

V.V.Pashkevich Arboretum at Uman'. Biul.Glav.bot.sada.
no.58:26-29 '65. (MIRA 18:12)

1. Dendrariy "Sofiyevka" TSentral'nogo respublikanskogo
botanicheskogo sada AN UkrSSR, Uman'.

REVA, M.L.

Founding of the Donetsk Botanical Garden of the Academy of
Sciences of the Ukrainian S.S.R. Ukr. bot. zhur. 22 no.5:
105-106 '65. (MIRA 18:10)

REVA, N.

7 000 litrov moloka - ot kazhdoi korovy
(7,000 liters of milk from each cow). Moskva, "Mo-
lodaia gvardiia", 1953. 24 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

28778 S/057/61/031/010/011/015
B109/B102

10 2000
26.2321
AUTHORS:

Suprunenko, V. A., Volkov, Ye. D., Reva, N. I.,
Sukhomlin, Ye. A., Burchenko, P. Ya., and Rudnev, N. I.

TITLE:

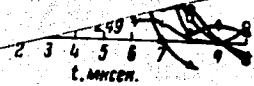
Study of dynamics of a pinch in a magnetic field

PERIODICAL:

Zhurnal tekhnicheskoy fiziki, v. 31, no. 10, 1961, 1246-1247

TEXT: The behavior of a pinch with respect to $m = 1$ -type instabilities was investigated experimentally. Test arrangement: Discharge tube made of porcelain: Inner diameter 18 cm, length 42 cm, hydrogen filling ($p = 1.5 \cdot 10^{-2}$ mm Hg). Current source: 15-microfarad capacitor. Discharge period: 30 to 60 μ sec. The discharge tube contained nine magnetic probes for determining the H_ϕ and H_z distributions. The measured values were recorded by five synchronized oscilloscopes OK-17M (OK-17M). Distribution of charge, current density, etc., were thus known for any point. Measuring results: The deviation amplitude of the discharge from the axis of the discharge tube is proportional to $\sqrt{E}$ (E - field strength), i. e., proportional to the current density (for measured values see Fig. 5). The radial velocity of the discharge, that is also growing linearly with

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Card

ACCESSION NR: AT4036051

S/2781/63/000/003/0144/0150

AUTHORS: Suprunenko, V. A.; Faynberg, Ya. B.; Tolok, V. T.; Sukhomlin, Ye. A.; Reva, N. I.; Burchenko, P. Ya.; Rudnev, N. I.; Volkov, Ye. D.

TITLE: Coherent interaction of runaway electrons in a pinch

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konferentsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 144-150

TOPIC TAGS: plasma pinch, plasma radiation, plasma ion oscillation, plasma electron oscillation, plasma compression, discharge plasma

ABSTRACT: The coherent radiation of transverse electromagnetic waves with frequency close to $\omega_0 (m_e/m_i)^{1/3}$ (ω_0 -- frequency of longi-

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ACCESSION NR: AT4036051

tudinal oscillations, m_e -- electron mass, M_i -- ion mass) excited in a plasma by a beam of "runaway electrons," was investigated. The experiments were carried out in a straight tube (alundum, 10 cm dia, 25 cm long) usually filled with hydrogen at 1.3 n/m^2 , through which a 15 F capacitor bank was discharged from 30--40 kV. Preliminary experiments with the setup were reported elsewhere (ZhTF, v. 30, 1057, 1961). In the present experiment the formation of the current of runaway electrons was investigated along with its correlation with the electromagnetic radiation of the plasma; some characteristics of this radiation were also investigated. The measurements have shown that an electron current, with energy equal to the maximum energy, constituted a small fraction of the total runaway electron current, the bulk of the current being due to electrons with energy somewhat higher than thermal but much lower than maximal. Part of the runaway electron beam goes to the development of electrostatic instabilities in the discharge, which give rise to the occurrence of the electromagnetic radiation. The radiation was found to

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ACCESSION NR: AT4036051

be coherent in the entire range of investigated initial gas pressures, with an intensity which is constant practically along the entire discharge length. The frequency of the electromagnetic radiation was found to be close to the plasma frequency and the power to exceed appreciably the power of thermal radiation from the plasma. The transformation of the longitudinal electrostatic oscillations into transverse electromagnetic waves can be attributed to the non-linearity of the oscillations in the plasma due to the large amplitude, and also to boundary effects on the surface of the plasma pinch. Orig. art. has: 5 figures and 3 formulas.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 21May64

ENCL: 03

SUB CODE: ME

NR REF SOV: 006

OTHER: 003

Card 3/6

REVA, N. I.

AID Nr. 981-5 3 June

COHERENT EM RADIATION FROM A HIGH CURRENT DENSITY PLASMA
(USSR)

Suprunenko, V. A., Ya. B. Faynberg, V. T. Tolok, Ye. A. Sukhomlin,
N. I. Reva, P. Ya. Burchenko, N. I. Rudnev, and Ye. D. Volkov. Atomnaya
energiya, no. 4, Apr 1963, 349-352. S/089/63/014/004/001/019

Results are given of experiments with plasma discharges at high current densities. Intense radial EM radiation was detected which was coherent and close to Langmuir frequency. Test apparatus included an aluminum discharge tube, 10 cm in diameter and 25 cm in length, charged with H_2 ; aluminum electrodes, connected by a 15- μ f capacitor bank charged to 30-40 kv and yielding a discharge current of about 100 kamp; an axial magnetic field variable from 0 to 10 kgs. Efforts to insure repeatability included the use of metal vacuum seals and a titanium pump, the baking of the apparatus at 300°C, and pre-ionization of the gas mixture prior to discharging. Electric field gradients of 300-500 v/cm gave a high "runaway" electron condition in the discharge beam.

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AID Nr. 981-5 3 June

COHERENT EM RADIATION [Cont'd]

S/089/63/014/004/001/019

This current was measured by means of a Faraday cell and a Rogovsky belt, both located at one electrode. A typical test result at a 6-kgs field strength and a 3-4- μ sec plasma life showed that coherent EM radiation received by a horn antenna through the tube wall and detected over the 8-14.4-mm wavelength region was as much as 10^7 times more intense than thermal radiation from a plasma of 10-ev electron temperature, and was constant along the column. Coherence was detected by two probe antennas placed 11 mm apart in the column and connected to an 8-mm interferometer. Variation of the magnetic field from 0 to 8 kgs had no effect on observed radiation. Variation of other parameters revealed a sharply critical value of runaway electron current, below which radiation is absent and above which it rises rapidly in intensity accompanied by a dip in runaway current. This verified a casual relationship between the two. The relation of radiation intensity to initial gas pressures and to radial distance from the plasma column are also discussed. [SH]

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ACCESSION NR: AP4043982

S/0089/64/017/002/0083/0088

AUTHOR: Suprunenko, V. A.; Sukhomlin, Ye. A.; Reva, N. I.

TITLE: Ohmic heating and electrical conductivity of plasma in strong electric fields

SOURCE: Atomnaya energiya, v. 17, No. 2, 1964, 83-88

TOPIC TAGS: ohmic plasma heating, plasma electrical conductivity, plasma, strong magnetic field, electrostatic plasma instability

ABSTRACT: The authors have experimentally investigated in detail the conditions of excitation of electrostatic instabilities in a quasistationary discharge in a strong magnetic field, and their effect on the electroconductivity and heating of the plasma. The discharge currents reached 100 kAmp. and the period 9 μ . sec. (the details of the experimental arrangement were described by V. A. Sy*pruchenko et al in Atomnaya Energiya 14, 349, 1961). Hydrogen and helium were used as discharge gases. The resistance of the discharge, the current produced by the "running away" electrons, microwave radiation of the plasma, and the elec-

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ACCESSION NR: AP4043982

tron temperature in the center of the discharge filament were measured. The density of the charged particles were determined by the stark effect broadening of the hydrogen-like lines. The authors found that at small electric fields, the resistance of the plasma is proportional to the square of the electric field, and after reaching the critical value of the field, increases rapidly. This critical field is proportional to the plasma density, inversely proportional to the electron temperature, and is independent of the nature of gas. "The authors are grateful to K. D. Smel'nikov and Ga. B. Fainberg for interest and constant help, and to O. S. Pavlichenk for help with the spectral measurements." Orig. art. has: 6 figures.

ASSOCIATION: None

SUBMITTED: 19Nov63

ENCL: 00

SUB CODE: EM, ME

NO. REF. SOV: 013

OTHER: 007

Card 2/2

L 52161-65 EWT(1)/EPF(n)-2/EWG(m)/EPA(w)-2 Pz-6/Po-4/Pab-10/Pi-4 IJP(c) WH/AT
ACCESSION NR: AP5014202 UR/0386/65/001/002/0045/0049
AUTHOR: Sukhomlin, Ye. A.; Reva, N. I.; Suprunenko, V. A.; Tolok, V. T. 62
TITLE: Excitation and thermalization of electron plasma waves in a high-current 61
gas discharge B
SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 1, no. 2, 1965, 45-49 21
TOPIC TAGS: plasma instability, plasma wave, plasma wave thermalization, plasma
heating
ABSTRACT: Beam instabilities may heat plasma by means of the large eddy electric
field at the front of the shock wave. Plasma heating may also occur in a high-
current gas discharge as the result of thermalization of the plasma waves generated
by the escaping electrons. From investigations of the conditions for the generation
of beam instabilities in a current-carrying plasma it was found that with strong
electric fields a considerable part of the energy supplied by an outside source is
absorbed by the plasma. Much of the absorbed energy contributes to the development
of intensive electrostatic oscillations, and as a result the resistance of the plasma
increases sharply and intensive microwave and x-ray radiation appear from the dis-
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L 52161-65

ACCESSION NR: AP5014202

charge. Measurements of the absolute values of the x-ray radiation intensity make it possible to evaluate the magnitude of the plasma flux on the walls of the chamber. Such measurements were carried out within a wide range of electric fields at various plasma densities. They showed that there is an optimum value for the electric field in a plasma at which the heating of electrons is most effective, and that the heating of electrons is the result of thermalization of plasma waves in a gas discharge, with 20% of the energy supplied to the discharge going directly for heating. Orig. art. has: 3 figures.

[JA]

ASSOCIATION: Fiziko-tekhnicheskii institut Akademii nauk Ukrainskoy SSR (Physico-technical Institute, Academy of Sciences, Ukrainian SSR)

SUBMITTED: 17Mar65

ENCL: 00

SUB CODE: ME

NO REF SOV: 005

OTHER: 002

ATD PRESS: 4018

Card 2/2

L 07408-67 EWT(1) IJP(c) GD/AT

ACC NR: AT6020574

(N)

SOURCE CODE: UR/0000/65/000/000/0126/0133

AUTHOR: Sukhomlin, Ye. A.; Supruchenko, V. A.; Reva, N. I.; Tolok, V. T.

62

ORG: none

B+1

TITLE: Dissipation of plasma oscillations excited in a current-carrying plasma

SOURCE: AN UkrSSR. Vysokochastotnyye svoystva plazmy (High frequency properties of plasma). Kiev, Naukovo dumka, 1965, 126-133

TOPIC TAGS: plasma heating, plasma oscillation, plasma conductivity, plasma containment

ABSTRACT: The heating and containment of plasma in a strong magnetic field in the presence of instabilities caused by "run-away" electrons is investigated. The experiment consists of a 100 ka linear discharge in hydrogen, characterized by the absence of gross hydrodynamic instabilities. The "run-away" current was monitored to study the onset of two-stream instability and the resultant thermalization of the plasma. In the absence of collisions the anomalous diffusion observed is attributed to an increase in the kinetic pressure of electrons in the center of the discharge. This effect was used to estimate the electron temperature from the time of arrival of the expanding plasma at the tube wall. The heating time, measured by observation of the emitted x-radiation and intense microwave bursts, is much shorter than that which can

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L 07409-67

ACC NR: AT6020574

be explained by collisional heating. The very high final temperature of the electrons (2 kev) and short heating time correspond to the postulated collective process of heating by a two-stream instability. Orig. art. has: 4 figures.

SUB CODE: 20/

SUBM DATE: 19Nov65/

ORIG REF: 008/

OTH REF: 005

Card 2/2

L 28491-66 EPF(n)-2/EWT(1)/EWT(m)/ETC(f)/EWG(m) IJP(c) AT

ACC NR: AP6013116

SOURCE CODE: UR/0057/66/036/004/0620/0626

AUTHOR: IAleksin, V.F.; Suprunenko, V.A.; Sukhomlin, Ye.A.; Reva, N.I.

ORG: none

TITLE: Measurement of the electron temperature of a plasma with the aid of soft x-ray bremsstrahlung

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no.4, 1966, 620-626

TOPIC TAGS: plasma diagnostics, electron temperature, x ray technique x ray absorption bremsstrahlung, electron density

ABSTRACT: The authors discuss the determination of the electron temperature of a plasma by measuring the absorption curves of the soft x-ray bremsstrahlung from targets located within the plasma. The work was undertaken because difficulties were encountered in determining plasma electron temperatures from the bremsstrahlung emitted by the plasma itself, owing to the large effect of small high atomic weight impurities. Moreover, by the use of a target it is possible under favorable conditions to measure both electron temperatures and densities in different parts of the plasma. The calculations necessary to convert the x-ray absorption curves to electron temperatures are performed, using density and absorption formulas in the monograph literature, and the principal results are tabulated. The proper selection of target and absorber

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UDC: 533.9.07

L 28491-66

ACC NR: AP6013116

materials is discussed; the significant factor is the location in the spectrum of characteristic radiations and absorption edges. To test the proposed technique, the authors measured the electron temperature in a magnetic field-stabilized linear hydrogen gas discharge in the apparatus described elsewhere by three of them (Atomnaya energiya, 17, 83, 1964). A 40 micron beryllium foil target was employed with beryllium and aluminum absorbers. The target was mounted in a short collimating side tube to protect it from fast electrons accelerated in the discharge field and from hard x rays from the electrodes. The x rays were detected with a scintillator, and the output from the photomultiplier was displayed on an oscilloscope. The x ray intensity decreased greatly when the beryllium target was replaced by a polyethylene film, indicating that the x rays came from the target and not from the plasma itself. The electron temperature was determined by comparing the observed absorption curves with calculated curves for different temperatures. The shapes of the observed and calculated curves were in good agreement, indicating that the electron distribution was close to Maxwellian. Both absorption curves gave the same electron temperature of slightly below 3 keV. The authors thank Academician K.D. Sinel'nikov of the AN UkrSSR for valuable discussions. Orig. art. has: 12 formulas, 7 figures, and 2 tables.

SUB CODE: 20

SUBM DATE: 25Dec64

ORIG. REF: 006

OTH REF: 007

Card 2/2 1/1

REVA, P., starshiy inzh.; PIVOVAROV, V., inzh.-mekhanik

Mechanized pigsty on the "Maiak" collective farm. Sil'.bud. 12
no.3:7-8 Mr '62. (MIRA 15:8)

1. Cherkasskoye rayonnoye otdeleniye "Sil'gosptekhniki".
(Cherkassy Province--Swine houses and equipment)

SAPRAZHENYAN, G. S., ENG., BABILEVICH, V. M., ENG., TSVERAVA, G. K., ENG., SOLODYUK,
V. A., ENG., GORFSTEYN, M. D., ENG., CHERNYSHEVICH, V. I., ENG., MORCZOV, N. YE., ENG.,
VELICHNEV, F. I., ENG., REVA, S. A., ENG.

Electric Cutcuts

Periodicity of repairing cutcuts. Elek. sta. 23 no. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

REVA, S.D., inzh.

Using the limiting conditions method in designing loading cranes
of the metallurgical industry. Prem. stroi. 36 no.12:17-18 D '58.

(MIRA 12:1)

(Cranes, derricks, etc.)

REVA, S.D.

Transport cranes of the coke chemical industry. Koks i khim.
no.8:54-56 '56. (MIRA 10:1)

1. Yuzhnyy nauchno-issledovatel'skiy institut po stroitel'stvu.
(Cranes, derricks, etc)

SATRAZBEKYAN, G. S., ENG.; BABULEVICH, V. K., ENG.;
TSVERAYA, G. K., ENG.; SOLODYUK, V. A., ENG.;
GORESHTEYN, K. D., ENG.; CHERNYSHEVICH, V. I., ENG.;
MOROZOV, N. YE., ENG.; VELIKONOS, F. I., ENG.; REVA, S. E., ENG.

ELECTRIC CUTOUTS

Periodicity of repairing cutouts. Elek. sta. 23, no. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952 ~~1953~~, Uncl.

REVA, V.; PYATKOVSKIY, A.

The skip pit of a blast furnace at the Kommunar Metallurgical Plant.
Prom. stroi. i inzh. soor. 5 no.2:18-19 Mr-Apr '63. (MIRA 16:4)

1. Glavnyy inzhener tresta "Kommunarskstroy" (for Reva). 2. Glavnyy
tekhnolog tresta "Kommunarskstroy" (for Pyatkovskiy).
(Kommunar--Blast furnaces--Design and construction)
(Reinforced concrete construction)

REVA, V.F., aspirant

Reinforcing concrete elements with glass reinforced plastics.
Trudy MIIT no.152:131-143 '62. (MIRA 16:6)

(Reinforced concrete)
(Glass fibers)

RMMA, V.V., inzh.

Model crossing. Put' 1 put. khoz. no.6:13 Je '58. (MIRA 11:6)

1. Izyumskaya distantziya puti, stantsiya Izyum Donetskoy dorogi.
(Izyum--Railroads--Crossings)

GAYDAR, P.R.; REVA, V. E.

Utilizing advanced operational practice. Put' i put. khoz. no. 4:28
Ap '58. (MIRA 11:4)

1. Zamestitel' nachal'nika distant sii, stantsiya Izym (for Gaydar).
2. Inzheuer distant sii, stantsiya Izyum.
(Railroads--Ties)

REVA, V.F., aspirant

Determination of the physical and mechanical properties of
twisted cables made of glass reinforced plastic. Trudy MIIT
no. 134:109-114 '61. (MIRA 15:5)
(Concrete reinforcement)
(Glass reinforced plastics)

RATUSHNYI, G.D.; REVA, V.I.

Making semisweet table wines by the method of fermenting juices
treated with ion exchange resins. Trudy KIPP no.22:354-360 '61.
(MIRA 16:4)

(Wine and winemaking)

(Ion exchange resins)

ANTOSHCHENKO, Ye.M.; IGNATENKO, A.D.; OBODAN, V.Ya.; REVA, V.K.

Television methods for automatic control of geometrical parameters
of controlled systems. Avtom. i prib. no. 1:73-78 Ja-Mr '64.

(MIRA 17:5)

VL VII, V.V.

STOYANOVSKIY, A.F.; REVA, V.V.

Simple appliance for determining bacterial pollution of air in populated areas. Zhur.mikrobiol.epid.i immun. no.3:53-56 Mr '54.
(MIRA 7:4)

1. Iz Dnepropetrovskogo instituta epidemiologii i mikrobiologii (direktor - kandidat meditsinskikh nauk V.G.Trukhmanov).
(Air--Bacteriology)

Translation M-218, 1 Mar 55

MAYGUBOV, Ye.N.; REVA, Ye.A.

Estimating the passability and determinating the motive force
for methods of internal pipeline cleaning. Gaz. delo no.1:17-19
'65. (MIRA 18:6)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta prirodnogo gaza.

DZEMIT, K.P., inzh.; PYATKOVSKIY, A.G., inzh.; REVA, V.Z., inzh.

Overall mechanization of concrete work. Mekh. stroi.

19 no.5:20-21 My '62.

(MIRA 15:5)

(Concrete construction)

KOVAL', P.I.; REVA, V.Z.; DZEMIT, K.I.; PYATKOVSKIY, A.G.; LICHAK, G.K.

Rapid construction of a blast furnace at the Voroshilov Plant.
Prom. stroi. 39 no.9:34-38 '61. (MIRA 14:10)

1. Trest Voroshilovskstroy.
(Voroshilovsk--Blast furnaces)

REVAI, Gyula, dr.

The planning contract. Epites szemle 5 no.11:344-345 N '61.

REVAI, Istvan, Dr.

Largactil therapy of senile cerebral arteriosclerosis. Orv. hetil. 99
no.13:448-449 30 Mar 58.

1. A.M. I.O. I. Szeretekorhaza es Betegotthona (igazgato es Belosztalyanak
foorvosa: Weiss Istvan dr. egyet. m. tanar) kozlemenye.

(ARTERIOSCLEROSIS, in aged

cerebral, ther., chlorpromazine (Hun))

(BRAIN, blood supply

arteriosclerosis in aged, ther., chlorpromazine (Hun))

(CHLORPROMAZINE, ther. use

arteriosclerosis, cerebral, in aged (Hun))

HUNGARY

REVAI, Istvan, Dr, SAFAR, Imre, Dr; III, District Council, Margit Hospital, Medical Ward (chief physician: BALASSA, Sandor, Dr) (III. Keruleti Tanacs Margit Korhaz, Belosztaly). Budapest.

"Intoxication in the Course of Work with Vilupal Lacquer."

Budapest, Orvosi Hetilap, Vol 107, No 43, 23 Oct 66, pages 2039-2040.

Abstract: [Authors' Hungarian summary modified] A case of formaldehyde intoxication, from using Vilupal for floor laquering, is described. Attention is called to the fact that, because of its widespread use in industry and in the households, the possibility of poisoning is present when Vilupal is used but the directions are not followed. 6 Hungarian, 1 Western references.

D'YERDI, G. [Gyorgyi, G.]; REVAI, Ya. [Revai, J.]

Theory of the latent symmetry of Kepler's problem. Zhur. eksp.
i teor. fiz. 48 no.5:1445-1447 My '65.

(MIRA 18:7)

1. Tsentral'nyy institut fizicheskikh issledovaniy Vengerskoy
Akademii Nauk, Budapesht.

REVAL, M.

"Innovator Conference For the Workers in State Administration." p. 15
(UJITOK LAPJA. Vol. 6, No. 22, Nov. 1954; Budapest, Hungary.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl..

REVAI, Miklos

Innovation versus bureaucracy. Munka 4 no.12:20-21 D '54.

1. Kozalkalmazottak Szakszervezete osztalyvezetoje.

REVAI, Miklos

Activation of anhydride of Perkupa. Veszprem vegyip egy kozl
4 no. 4395-396 '60

1. Budapesti Cementaruiipari Vallalat.

RPVAD, Stefan

Ten years of the Vahostav National Enterprise. Vodni hosp 14 no.9:
337-338 '64.

DAVID, Stefan

Compacting of rock walls. In: starry 12 no. 6-200 Je 194.

L 20853-66 EWT(d) IJP(c)

ACCESSION NR: AP5013905

UR/0056/65/048/005/1445/1447

AUTHOR: D'yerdi (Gyorgyi), G; Revai, Ya. (Revai, J.)

TITLE: On the hidden symmetry of the Kepler problem

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 5, 1965, 1445-1447

TOPIC TAGS: Kepler problem, hydrogen atom, Hamiltonian, group theory, hidden symmetry, invariance property

ABSTRACT: The authors consider the hidden symmetry of the n-dimensional Kepler problem, first pointed out by V. A. Fok (Zs. Phys. v. 98, 145, 1935), wherein the Hamiltonian for the hydrogen atom is invariant under the four-dimensional rotation group (or the Lorentz group). Rather than choose a specific representation of the operators, the authors use only algebraic (commutation) properties of the operators. Because of the close analogy between quantum mechanical operators and classical quantities, such an approach to the problem enables the authors to explain how the hidden symmetry of the problem manifests itself within the framework of classical mechanics. Orig. art. has: 8 formulas.

ASSOCIATION: Central Institute for Physical Research, Hungarian Academy of Sciences, Budapest

Card 1/2

L 20853-66

ACCESSION NR: AP5013905

SUBMITTED: 12Dec64

ENCL: 00

SUB CODE: GP

NR REF SOV: 002

OTHER: 008

Card 2/2

REVALD, V.F.

Excitation of neon in a positive discharge column at low pressures.
Opt. 1 spektr. 18 no.4:552-561 Ap '65.

(MIRA 18:8)

ACCESSION NR: AP4009454

S/0051/63/015/006/0726/0733

AUTHOR: Frish, S.E.; Revald, V.F.

TITLE: Cross sections for direct and step-by-step excitation of neon atoms

SOURCE: Optika i spektroskopiya, v.15, no.6, 1963, 726-733

TOPIC TAGS: excitation cross section, direct excitation, step-by-step excitation, level population, neon spectrum, neon

ABSTRACT: It has been hypothesized by a number of authors that excitation of high-lying levels of neon occurs not only from the ground state but also via intermediate $2p^53s$ levels, in other words, that there occurs step-by-step excitation. However, the data reported in the literature on the cross sections for step-by-step excitation are conflicting. Accordingly, in the present work there were measured the absolute cross sections for direct excitation of the levels of neon. The direct excitation cross sections were measured by the method of an electron beam, using a tube similar to that described by I.P.Zapesochnyy (Vestnik, LGU, No.11, 67, 1954). Specifically, there were measured the Ne I lines associated with $2p^53pY \rightarrow 2p^53sX$ transitions. Most of the measurements were made with an accelerating potential of

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AP4009454

48 V; the beam current was 20 to 300 μ A; the pressure in the tube 0.01-0.08 mm Hg. On the other hand, there were calculated the line intensities on the assumption that there obtains only direct excitation. Comparison of the calculated data with the experimental values led to the conclusion that in the region of low pressures and low discharge current densities there is a good agreement between the experimental and calculated results, indicating that direct excitation is predominant. But with increase of the current the calculated intensities are lower than the observed ones, which may be taken as evidence that with increase of current there is an increase in the number of free electrons in the plasma and that step-by-step excitation begins to play a significant role. The value of the cross section for step-by-step excitation ($2p^53sX \rightarrow 2p^53pY$) calculated on the basis of the divergence between the theoretical and experimental line intensities is $\sim 10^{-16}$ cm². Orig.art.has: 12 formulas, 5 figures and 3 tables.

ASSOCIATION : none

SUBMITTED: 29Apr63

DATE ACQ: 03Jan64

ENCL: 00

SUB CODE: PH

NR REF SOV: 007

OTHER: 002

Card 2/2

L 61681-65 EWT(1)

ACCESSION NR: AP5011109

UR/0051/65/018/004/0552/0561
537.523/.527 : 546/292

AUTHOR: Revald, V. F.

TITLE: Excitation of neon in a positive discharge column at low pressures

SOURCE: Optika i spektroskopiya, v. 18, no. 4, 1965, 552-561

TOPIC TAGS: neon, positive column, level population, excitation cross section, atom concentration, reabsorption method

ABSTRACT: The absolute intensities of the spectral lines corresponding to the transitions $2p^53sX \rightarrow 2p^53pY$ were measured in a positive column of a low pressure neon discharge ($5.1 \times 10^{-1} -- 3.5 \times 10^{-1}$ mm Hg). The experimental tube for discharge excitation was described elsewhere (Opt. i spektr. v. 15, 726, 1963). A probe method was used to determine the voltage-current characteristic and a standard procedure was used to obtain the electron temperature. The concentration of the excited atoms at the levels $2p^53s^1p_1P_1$ and $^3P_{0,1,2}$ was determined by a variant of the reabsorption method in which one mirror was used (S. E. Frish and O. P. Bochkova, Vest. LGU no. 16, 40, 1961). The reabsorption was measured for 23 neon lines corresponding to the transitions $2p^53pY \rightarrow 2p^53sX$ at various pressures and

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L 61681-65

ACCESSION NR: AP5011109

currents from 18 to 150 mA. The values obtained for the level populations $2p^53sX$ at 5.1×10^{-2} mm Hg were used to determine the effective cross sections for the excitation of the $2p^53sX$ levels ($\sim 10^{-18}$ cm²). The populations at the levels $2p^53pY$ and $2p^53sX$ calculated at 1.0 and 3.5×10^{-1} mm Hg are higher by about 18.5 and 16.5 eV than the measured values, a fact attributed to deviation of the electron energy distribution from Maxwellian. "The author thanks S. E. Frish for suggesting the topic and for help with the work." Orig. art. has: 5 figures, 15 formulas, and 3 tables.

ASSOCIATION: None

SUBMITTED: 05Jul64

ENCL: 00

SUB CODE: OP, NP

NR REF SOV: 009

OTHER: 000

llc
Card 2/2

AUTHOR: Revasov, M.I. SOV-101-58-4-7/12

TITLE: The Improvement of Cement Loading in Bulk (Uluchsheniye skhemy pogruzki tsementa navalom)

PERIODICAL: Tsement, 1958, Nr 4, pp 25-26 (USSR)

ABSTRACT: The article is a description of an improvement in pneumatic bulk-cement loading, realized at the Tsementnyy zavod Oktyabr' (Oktyabr' Cement Plant) by interconnecting the cement pipe lines of the silos. This improvement cut the loading outlets to 3, and resulted in: a reduction of auxiliary operations, a quicker loading process, and economies in pipe line material.
There are 2 diagrams.

ASSOCIATION: Kavkazgiprotsvetmet

1. Cement--Loading 2. Pneumatic systems--Applications

Card 1/1

CZECHOSLOVAKIA/Meadow Cultivation.

L

Abs Jour : Ref Zhur Biol., No 14, 1958, 63252

Author : Revay, J.

Inst :

Title : Factors Assisting in the Development of Regenerative Shoots of Timothy

Orig Pub : Pol'mohospodarstvo, 1956, 3, No 4, 456-477

Abstract : On the basis of experiments, conducted in Slovakia in 1951-1955, an interdependence between the development of vegetative and regenerative shoots of timothy, on the one hand, and the amount of light, and nutrients, on the other, was established. A sufficient amount of nutrients, heat and light favorably affects the height of the plants and the growth and development of new leaves and vegetative shoots, but retards the development of regenerative shoots. The duration of the vegetative period depends upon the amount of light, heat and nutrients;

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CZECHOSLOVAKIA/Meadow Cultivation.

L

Abs Jour : Ref Zhur Biol., No 14, 1958, 63252

the greater the amount of light, the shorter is the vegetative period. With a sufficient amount of nutrients but with an insufficient amount of light and heat, the vegetative period lasts longer. Earing begins at a temperature of 15-18°. Timothy grows best of all in mountain and foothill regions. To obtain a rich seed crop, it is necessary, even in the first year of usage, to sow not later than 1-15 August.

Card 2/2

- 3 -

REVAY, Jozsef, dr., az irodalomtudomány doktora

The world's oldest daily newspaper. Elet tud 15 no.6:163-166
7 F '60.

REVAY, Jozsef, dr.

Chinese silk in ancient Rome. Elet tud 15 no.44:1379-1382
20 0 '60.

REVAJ, J.

Viac bielkovinnej silaze pre nase zvierata. (More Albuminous Silage for Our Livestock. illus., bibl.) B. Bystrica, KNV, 1957. 42 p.

Information on plants which are suitable for use in the silage, methods of silage preparation and importance of nutritive materials in the silage for efficient feeding of livestock.

Bibliograficky katalog, CSR, Slovenske knihy, Vol.VIII. 1957. No.9. p.281-282.

DOLEZSAL, Karoly; REVAY, Miklos

Estimating the initial strength of aluminate cement. Epitoanyag
16 no. 8:284-287 Ag '64.

1. Central Research Institute of Building Materials Industry,
Budapest.

TAMAS, Ferenc, dr.; REVAY, Miklosne

Determination of free lime content in portland cement.
Epitoanyag 16 no. 8:277-283 Ag '64.

1. Basic Research Division, Central Research Institute of
Building Materials Industry, Budapest. 2. Editorial board
member, "Epitoanyag" (for Tamas).

IVANOV, E.A.; REVAZASHVILI, B.I.

Application of multiple regression for the mathematical description of some technological relationships of the flotation process.

Izv. vys. ucheb. zav., tsvet. met. 7 no.5:143-149 '64
(MIRA 18:1)

1. Kazmekhanobr.

REVAZASIVILI, B.I., kand. tekhn. nauk; IVANOV, L.A., inzh.

Finding the optimal amount of pH in pulp. Ser. zhur. no. 8:75
Ag '64. (MIRA 17:10)

1. Institut Kazmekhanobr.

REVAZASHVILI, B.I.

Automatic control of ore dressing plants. TSvet. met. 35 no.1:
10-15 Ja '62. (MIRA 16:7)
(Ore dressing) (Automatic control)

REVAZASHVILI, B.I.

Distribution of residual concentration of xanthate in the flotation process and its connection with technological indices. Trudy Inst. met. i obog. AN Kazakh. SSR 6:14-21 '63. (MIRA 16:10)

REVAZASHVILI, B.I.; IVANOV, E.A.; KULESHOV, Yu.G.

Potentialities for increasing the effectiveness of the flotation
process. TSvet. met. 36 no.5:24-29 My '63. (MIRA 16:10)

MART'YANOV, Yu.A.; REVAZASHVILI, B.I.; SHTERN, M.D.

Wet grinding of iron scrap at the Karsakpai Ore Dressing Plant of
the Dzhezkazgan Mining and Metallurgical Combine. TSvet. met. 33
no.11:11-17 N '60. (MIRA 13:11)

1. Kazmekhanobr.

(Karsakpai--Ore dressing)

(Scrap metals)

REVAZASHVILI, B.I.; RYNDIN, A.N.; BEREZIN, Yu.L.

Testing a sound-ranging regulator for the automatic control of
mill charging at the Tekeli ore dressing plant. TSvet.met. 35
no.12:8-12 D '62. (MIRA 16:2)
(Tekeli--Crushing machinery) (Automatic control)

IVANOV, E.A., inzh.; REVAZASHVILI, B.I., kand.tekhn.nauk

Using statistical dynamics methods for calculating dynamic characteristics of the flotation process. Izv.vys.ucheb.zav.: gor. zhur. 7 no. 1:154-161 '64. (MIRA 17:5)

1. Institut Kazmekhanobr. Rekomendovana laboratoriyey avtomatizatsii.

REVAZASHVILI, B.I., inzh.; IVANOV, I.A., inzh.; KLUBIN, Ye.P., inzh.

Automatic feeder for reagents. Gor. zhur. no.7:53-54 31 '64.
(MIRA 17:10)

1. Institut Kazmekhianobr, Alma-Ata.

REVAZASHVILI, B. I.

Residual concentration of xanthate and its connection with
metal recovery in flotation. TSvet. met. 35 no.10:24-28 0 '62.
(MIRA 15:10)

(Flotation)

REVAZASHVILI, B.I.
BELYAYEV, A.M.; IOFFE, E.I.; PERVOZVANSKIY, A.I.; NAVASARDYAN, Ye.N.;
BLIOKH, S.S.; REVAZASHVILI, B.I.; PROTOPOPOV, M.M.; RAKHMATULLIN,
K.Kh.; SEMENOV, V.I.; KRIVOSHEIN, S.S.; SHVETSOV, A.P.; MAKAROV, M.P.;
OTROZHDENNOV, A.I.; ZHUKOV, D.D.; BELYAYEV, A.M.

Speeches. Trudy Mekhanobr. no.93:122-173 '56. (MIRA 11:6)
(Ore dressing--Equipment and supplies) (Waste products)

IOFIN, Stanislav Leonidovich; KULIKOV, Aleksandr Vasil'yevich; KULIKOV, Vladimir Vasil'yevich; POLISHCHUK, Afanasiy Dmitriyevich; PROKOP'YEV, Ye.P., professor, doktor tekhnicheskikh nauk, retsentsent; REVAZOV, A.A., gornyy inzhener, retsentsent; RYCHIK, P.P., kandidat tekhnicheskikh nauk, redaktor; PARTSEVSKIY, V.M., redaktor izdatel'stva; MIKHAYLOVA, V.V., tekhnicheskiy redaktor

[Forced roof caving] Prinuditel'noe otvashnoe obrusheniye. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1957. 34 p. (MLRA 10:7)
(Mining engineering)

REVAZOV, A.D., gornyy inzhener.; TYURYAKOV, A.F., gornyy inzhener.

Stripping the Altyn-Topkan open pit by large-scale blasting.
Gor. shir. no.1:44-47 Ja '57. (MLRA 10:4)

1. Glavtsinkavints i Ministerstvo tsvetnoy metallurgii SSSR.
(Altyn-Topkan--Strip mining) (Blasting)

POLYAKOV, N.N., kandidat tekhnicheskikh nauk; REVAZOV, A.D., inzhener

Bauxite mining methods in the Northern Urals. Gor. zhur. 122
no. 1:10-14 Ja '48. (MLRA 8:9)

(Ural Mountains--Bauxite)

REVAZOV, A.N., inzhener.

Continuous-action apparatus for processing glowers and herbs containing essential oils. Masl.-zhir.prom. 18 no.5:18-20 My '53. (MLRA 6:5)

1. Pakhtaabadskiy sovkhos-zavod "Efironos". (Esences and essential oils)

1. REVAZOV, A. N.
2. USSR (600)
4. Geraniums
7. Increasing the efficiency of processing geraniums, Masl. zhir. prom., 17, no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

REVAZOV, G.

In the schools of North Ossetia. Prof. tekhn. obr. 21 no. 1433 Ja
'64. (MIRA 17:3)

1. Nachal'nik Severo-Osetinskogo respublikanskogo upravleniya pro-
fessional'no-tekhnicheskogo obrazovaniya.